

Inventors: Frederick R. Ernest, Bret A. Clippinger, Mark H. Smith

## FINISH TRIM COMPONENT

### TECHNICAL FIELD AND INDUSTRIAL APPLICABILITY OF THE INVENTION

This invention relates to a finish trim components particularly for residential walls. The trim component is a corner piece that enables base and cove trim pieces to be joined without the use of glue, fasteners or miter joints.

### BACKGROUND OF THE INVENTION

U.S. Patent No. 5,199,237 discloses a corner receptacle for forming a joint between adjacent decorative wall moldings. Specifically, the corner receptacle engages with a complimentary fit over exposed decorative contoured surfaces of two lineal crown moldings secured to walls adjacent an outside corner. The corner receptacle slidably or telescopically receives the moldings. The corner receptacle provides the exterior appearance of an accurate and precise joint even though there is a gap between the adjacent ends of the lineal moldings. This permits the moldings to have rough-cut ends and to be cut to only the correct length.

U.S. Patent No. 5,001,877 discloses a room partition wall trim corner cap assembly for use with ceiling trim moldings. Each corner cap trims a junction between a ceiling and two vertical intersecting walls. A corner cap is a one-piece, hollow body having right angled portions into which the trim molding may be inserted. Further, the corner caps are preferably molded by an injection molding process.

Each of U.S. Patent Nos. 5,398,469, 5,457,923 and 5,496,512 discloses a corner-molding element for a decorative molding strip. A corner molding element

is used with molding strips of similar transverse configuration, the ends of which either abut or slightly overlap behind ends 52A and 52B of the comer element. The ends of molding strips S, adjacent to the comer element, are adhesively secured in overlapping element behind ends 52A and 52B of the comer element. The comer piece is then supported by molding strips S and is used to eliminate the need to miter the ends of molding strips S for a comer fit.

U.S. Patent No. 2,915,794 discloses a comer-molding piece used for joining strips of molding material at a comer. The corner-molding piece includes an outer shell having two angularly disposed arms 11 and J 2 extending at right angles to each other. Each arm is molded to conform to the contour of trim molding pieces and to fit over the molding pieces to be joined. When comer-molding 10 is in place and wall moldings 13 have been inserted into open ends of the comer molding arms, only wall moldings 13 need to be secured to the wall. Tongues 20 of comer molding 10 are recessed behind wall moldings and locks corner molding in place, thereby eliminating the necessity for nailing or otherwise securing comer molding to the wall.

U.S. Patent 3,464,177 illustrates a metal or plastic clamp-on room baseboard having wall mounted means to which the baseboard may be easily secured, or detached without the use of tools.

U.S. Patent 3,956,861 discloses a flexible trim arrangement for interior walls having a pair of outwardly facing upper and lower trim walls juxtaposed to and separated by a continuous slot extending longitudinally. The trim member is secured to the wall surface by applying fasteners at random positions along the anchoring wall through a slot. The trim member may be applied at the upper portion of a wall or at the base of wall. Additionally, the trim member may be applied at chair back top level to serve as a chair rail.

U.S. 4,852,318 illustrates an L-shaped corner piece constructed of molded plastic having two arms that extend flatly adjacent to respective walls between the

baseboard of the wall and the corner. The arms have the same height and thickness as the baseboards to simulated continuation of the baseboards.

U.S. 5,398,469 discloses a decorative molding strip for a corner formed by a ceiling and a vertical wall constructed of thin plastic. The strip is secured to the wall by an adhesive or a wall track and clip arrangement. A corner element is provided in which ends of the strips are adhesively secured thereto in overlapping engagement.

U.S. 5,592,797 illustrates a molding strip made of flexible plastic having clips thereon and flexible tracks engaged by the clips. A plastic corner member has a one-piece plastic body having side walls intersecting at substantially the same angle as the angle formed by the edges of the ends of adjacent flexible molding strips.

U.S. 5,615,530 discloses an applicator tool for applying cementitious materials, such as joint compound, to the corners of walls. The tool has a handle and a head, which is curved and formed preferably from plastic. Using the tool results in a smooth, uniform finished corner.

U.S. 5,711,123 illustrates a decorative molding having an elongate channel recessed into its front face and adapted to releasably retain and elongate strip-like panel in either a concavely flexed position or a flat or convex position. The molding has corner caps, which are snap-locked into the moldings and are typically positioned to cover the exposed ends of the moldings at a room corner.

U.S. 5,802,790 discloses a decorative molding corner cap for capping one or more exposed ends of a molding, in particular where two elongate molding pieces meet at a corner. The corner assembly has first and second mating, mirror-image corner components. The components are slidably engaged over the exposed outer surface of the respective linear moldings and, when installed, are positioned generally as to overlap the exposed ends of the moldings.

In the past, molding pieces, or trim blocks, have required the use of fasteners or glue to attach the trim components to the trim blocks. Installation of the trim blocks and trim components was time-consuming. Further, if necessary, the trim blocks and trim components could not be removed without considerable damage being done to the underlying wall.

There is a need for an improved, low-cost, corner trim assembly constructed of lightweight materials that permit easy installation and removal which providing an aesthetically pleasing appearance.

### SUMMARY OF THE INVENTION

These needs are met by the present invention, wherein an improved corner trim assembly is provided.

It is an object of the present invention to provide a corner trim assembly in which slidably receives trim components without the use of fasteners, glues or nails.

It is an object of the present invention to provide a corner trim assembly in which trim components slidably engage the corner trim assembly to provide an aesthetically pleasing finish to base and cove trim.

It is an object of the present invention to provide a corner trim assembly which is easy to install.

It is an object of the present invention to provide a corner trim assembly which includes a protective foil to protect against the effects of UV light.

It is an object of the present invention to provide a corner trim assembly which can be completely removed from the trim components and wall without causing damage to the trim components and wall and can be reused again.

Other objects and advantages of the present invention will become apparent upon considering the following detailed description and appended claims, and upon reference to the accompanying drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of the corner trim assembly of the present invention.

Fig. 2 is a perspective view of the corner trim assembly and trim components of the present invention.

### DETAILED DESCRIPTION AND PREFERRED EMBODIMENTS OF THE INVENTION

The present invention is directed to a finishing trim component particularly for residential walls. The trim component is a corner piece that enables base and cove trim pieces to be slidably joined without the use of glue, fasteners or miter joints.

Referring now to Fig. 1, corner finishing trim assembly 2 is illustrated. Corner finishing trim assembly 2 is made by a conventional extrusion molding process. A preferable method is a profile extrusion process typically used for molding parts such as window trim and other trim components.

Preferably the trim assembly 2 is constructed of a thermoplastic material such as polyvinyl chloride, high-density polyethylene, low-density polyethylene, polypropylene, polymethyl methacrylate or polystyrene. However, other thermoplastic materials may be used, i.e., to meet cost requirements, flexibility, etc.

The corner finishing assembly 2 is preferably covered with a laminate (not shown) such as a UV protective wood grain foil, white foil or another laminate. A conventional method used to apply the laminate is a hot stamping method in which a pigmented, metallic or wood grain foil is placed between an etched metal or rubber die and the surface of the polymer piece. The etched pattern is the reverse

of that desired on the plastic. Heat, pressure, and a specific dwell time is then applied to stamp the pattern onto the surface.

After a laminate is applied to the trim assembly 2, it is then miter cut to form two polymer pieces 4,6. Polymer pieces 4,6 are then welded together along joint 10 to form corner finishing assembly 2. The polymer pieces 4,6 are welded together in the desired degree joint. There is a variety of welding techniques for thermoplastic polymers that allow formation of strong joints. The methods allow economical fabrication of complex parts by joining individual components. Such processes include, but are not limited to, heated tool (hot plate) welding, hot gas welding, ultrasonic welding, infrared welding, solvent welding, vibration welding, induction welding, microwave welding, resistance welding, extrusion welding, and laser welding.

Corner finishing assembly 2 includes flanges 8, 10, 12, 14 (Fig. 1) for slidably engaging trim components 16, 18 as shown in Fig. 2. Corner finishing assembly 2 can be used as base and/or cove trim pieces. No adhesives, fasteners or nails are used to engage the trim components 16, 18 with the corner finishing assembly 2. Trim components 16,18 are friction fit into the corner finishing trim assembly 2.

Corner finishing assembly 2 is particularly useful in the finishing of basements, preferably with The Owens Corning Basement Finishing System™ used in residential applications. The Owens Corning Basement Finishing System™ is an alternative to conventional wall framing and gypsum wallboard and consists of PVC support lineals, base, batten and cove moldings, and rigid prefinished fiberglass panels. One of the primary features of The Owens Corning Basement Finishing System™ is the prefinished wall panel. The wall panels are breathable, are dent-resistant and can be easily removed for easy access to interior foundation walls. Corner finishing assembly 2 is used as base and/or cove trim piece in this system to slidably engage trim components so that they can be easily removed and the wall panels can be accessed for removal.

While the invention has been described in terms of preferred embodiments, it will be understood, of course, that the invention is not limited thereto since modifications may be made by those skilled in the art, particularly in light of the foregoing teachings.